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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,689	04/16/2004	Suning Wang	2003-009-03US	8857

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EXAMINER	
MESH, GENNADIY	
ART UNIT	**PAPER NUMBER**
1774	

DATE MAILED: 04/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/825,689	WANG ET AL.	
	Examiner	Art Unit	
	Gennadiy Mesh	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/16/2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-51* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1- 10, 12,13 and 16 drawn to Compounds, classified in various classes and subclasses, depend upon specific identity of variables in the formula.

II. Claims 11,14 and 15, drawn to Method of synthesizing of claimed Compounds, classified in class 564, subclass 395.

III. Claims 17-19, drawn to Composition comprising an organic polymer and a solvent, classified in class 524, subclass – various.

IV. Claim 23, drawn to Method of producing electroluminescence, classified in class 257, and subclass 40.

V. Claims 32 – 34, drawn to Method of detecting metal ions or acid, classified in class 252, subclass various.

VI. Claims 35 - 44, drawn to Method of harvesting photons and Method of separating charges, classified in class 136, subclass 243.

VII. Claims 20 – 22, 24-31 and 45 – 51, drawn to Devices (flat panel display, luminescent probe, electroluminescent devices, photocopier, photovoltaic, photoreceptor, solar cell, semiconductor, molecular switch) classified in various classes and subclasses.

The inventions are distinct, each from the other because of the following reasons:

1. Inventions (I) and (II) are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case product as claimed in invention (I) can be made by another and materially different process (II) using different reactants: substituted bromopyrenyls for example.

2. Inventions (I) and (III) are directed to related products. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, inventions (I) and (II) are distinct products because, they do not overlap in scope and can have a materially different design and effect.

3. Inventions (I) and (IV, V, VI) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the process (inventions IV – VI) for using the product as claimed by invention (I) can be practiced

with another materially different product, for example another organic hole transport luminescent compound.

4. Inventions (I) and (VII) are directed to related products. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, inventions as claimed do not overlap in scope, and can have a materially different design and function.

5. Inventions (II) and (III – VII) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions (II) and (III –VII) are not disclosed as capable of use together and they have different modes of operation.

6. Inventions (III) and (IV – VII) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions (III), not related to inventions (IV – VII), because they are not disclosed as capable of use together and they have different modes of operations.

7. Inventions (IV) and (V – VI) are directed to related processes. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the

inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, inventions as claimed do not overlap in scope and can have different mode of operation and/or function.

8. Inventions (IV) and (VII) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case device (apparatus) – for example photocopier - can be used to practice another and materially different process than producing electroluminescence per invention (IV).

9. Inventions (V) and (VI) are directed to related processes. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, process of invention (V) and process of invention (VI) do not overlap in scope, the inventions as claimed are not obvious variants; and the inventions as claimed can have different mode of operation and function.

10. Inventions (V) and (VII) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the

apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case device (apparatus) – for example photocopier - can be used to practice another and materially different process than detecting metal ions per invention (V).

11. Inventions (VI) and (VII) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case device (apparatus) - for example molecular switch - can be used to practice another and materially different process than harvesting photons per invention (VII).

Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

If Applicant will elect one of the inventions above, than Applicant should further elect a single (ultimate) distinct species disclosed in that particular invention.

10. For invention (I):

There are no generic claims to the following disclosed patentably distinct species of invention (I): different chemical compounds described in claims 1,2 and 3. The species are independent or distinct because of different chemical structure.

Invention (I) contains different compounds per general formula 1A in claim 1, compounds per general formula 1B in claim 2 and compounds per general formula 1C

in claim 3. Because general formula 1B covered all possible compounds of formula 1A and some compounds covered by formula 1C, than Applicant is required elect one distinct (ultimate) compound by formula 1B or one compound covered by formula 1C, but not covered by formula 1B.

11. For invention (II):

There are no generic claims in invention (II). Applicant is required select one single distinct (ultimate) compound from invention (I) and method of producing of this compound per invention (II).

12. For invention (III):

There are no generic claims in invention (III). Applicant is required select one single distinct (ultimate) compound from invention (I) what will be used in polymeric composition per invention (III).

13. For invention (IV):

There are no generic claims in invention (IV). Applicant is required select one single distinct (ultimate) compound from invention (I) what will be used in invention (IV).

14. For invention (V):

There are no generic claims in invention (V). Applicant is required select one single distinct (ultimate) compound from invention (I) what will be used in invention (V).

15. For invention (VI):

There are no generic claims in invention (VI). Applicant is required select one single distinct (ultimate) compound from invention (I) what will be used in invention (VI).

16. For invention (VII):

There are no generic claims to the following disclosed patentably distinct species: a flat panel display, a luminescent probe, an electroluminescent devices, a photocopier, a photovoltaic device, a photoreceptor, a solar cell, a semiconductor and a molecular switch. The species are independent or distinct because they can have different design and mode of operation. Applicant is required to elect one of them. Applicant is also required elect single distinct (ultimate) compound from invention (I) for each elected device of invention (VII).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gennadiy Mesh whose telephone number is (571) 272 2901 or to Marie Yamnitzky, whose telephone number is (571) 272 1531. The examiner can normally be reached on 8a.m - 3 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272 3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

G.Mesh
G.M.

April 20,2006

Marie K. Yamnitzky

MARIE YAMNITZKY
PRIMARY EXAMINER

1774

04/25/2006